



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/374,460	08/13/1999	HAMAYUN MUJEEB	10360/031001	3785
33000	7590	08/12/2004	EXAMINER	
DOCKET CLERK P.O. DRAWER 800889 DALLAS, TX 75380			HYUN, SOON D	
			ART UNIT	PAPER NUMBER
			2663	13
DATE MAILED: 08/12/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/374,460

Applicant(s)

MUJEEB ET AL.

Examiner

Soon D Hyun

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 16-19, 23-44, 47-50, 54-76, 79, 81, 82, 86-107 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-31, 54-63, 86-102 and 107 is/are allowed.
- 6) ☒ Claim(s) 1-7, 10, 11, 13, 16-19, 32-38, 41-44, 47-50, 64-70, 73-76, 79, 81, 82 and 104-106 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 39, 40, 71 and 72 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-7, 10, 11, 13, 16-19, 32-38, 41-44, 47-50, 64-70, 73-76, 79, 81, 82, and 104-106 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-7, 10, 11, 13, 16-19, 32-38, 41, 42, 44, 47-49, 50, 64-70, 73, 74, 76, 79, 80, and 82 are rejected under 35 U.S.C. 102(e) as being anticipated by Khouri et al (U.S. Patent No. 6,072,806).

Regarding claims 1, 16, 32, and 47, Khouri et al discloses a method of switching between physical interfaces (ports 8-10) on a device (a server 32 in FIG. 2), the method comprising:

switching from a first physical interface (a port 8) to a second physical interface (a port 9) on the device based on information in an interface redundancy group (a link status database in FIG. 2, col. 6, lines 43-62, FIG. 3A) such that the second physical

Art Unit: 2663

interface assumes responsibilities of the first physical interface, the responsibilities comprising a one of routing and bridging functions (FIG. 5), and wherein the first physical interface is operable for interfacing to a network (a network connecting a server 32 and a node 26 in FIG. 2) and the second physical interface is operable for interfacing to the network;

wherein the information in the interface redundancy group comprises a first identifier and a second identifier (80 in FIG. 3A), the first identifier identifying the first interface as a primary interface for the device and the second identifier identifying the second physical interface as a secondary interface for the device (col. 7, lines 6-18).

Regarding claims 2, 33, 64, 65, 79, 81, and 82, Khouri et al discloses an apparatus (32 in FIG. 2) which switches between physical interfaces (ports 8-10), the apparatus comprising:

a first physical interface (port 8) operable for interfacing to a network (a network connecting a server 32 and a node 26 in FIG. 2);

a second physical interface (port 9) operable for interfacing to the network;

a third physical interface (port 10) operable for interfacing to the network; and

a processor operable (link selector 72 in FIG. 2) for executing instructions (FIG. 5) to switch from the first physical interface to the second physical interface based on information in an interface redundancy group (a link status database in FIG. 2, col. 6, lines 43-62, FIG. 3A) such that the second physical interface assumes responsibilities of the first physical interface, the responsibilities comprising a one of routing and bridging functions (FIG. 5);

switch from the second physical interface to the third physical interface based on information in the interface redundancy group (col. 7, lines 6-18);

wherein the information in the interface redundancy group identifies the first physical interface as a primary interface for the device, the second physical interface as a secondary interface (first backup) for the device, and the third physical interface as a tertiary interface (backup for the first backup) for the device (col. 7, lines 6-18).

Regarding claims 3, 4, 17-19, 34, 35, 66, and 67, Khouri et al further discloses a step of detecting (monitoring) an event (a failure in the primary link), wherein switching is performed in response to the event (col. 7, lines 6-18). It is inherent that the failure on the primary link includes any failure on the primary interface and a link coupled to the interface, because the server is not able to transmit data over the primary link due to the failure on the interface.

Regarding claims 5-7, 36-38, and 68-70, refer to the discussion for claims 4, 35, and 67, above. However, Khouri et al does not explicitly teach a structure of the primary interface comprising a driver, a signaling stack and slot. It is inherent that each port comprises a driver (a transceiver), a signaling stack and a slot (a card for the port) for transmitting and receiving data and for communicating information with other components (68, 70, 72 in FIG. 2). Therefore, the failure of the primary interface comprises a failure of a one of the driver the signaling stack and the slot.

Regarding claims 10 and 11, 41, 42, 73, and 74, Khouri et al further discloses that the server supports a plurality of message versions (network layers).

Regarding claim 13, 44, and 76, the ports are resident on the server (a single network router which routing data between node 1 and node 2 in FIG. 2) for the apparatus and one or more secondary interfaces for the apparatus. wherein the information in the interface redundancy group identifies comprises a first identifier and a second identifier, the first identifier identify the first physical interface as a primary interface for the device and the second identifier identifying the second physical interface as a secondary interface for the device.

Regarding claims 48-50, refer to the discussion for claim 64 and 66.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 12, 43, 75, and 104-106 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khouri et al (U.S. Patent No. 6,072,806).

Regarding claim 12, 43, and 75, refer to the discussion for claim 1, above.

However, Khouri et al (Khouri) does teach that the first and second interfaces comprise

Art Unit: 2663

ATM interfaces. Those of skill in the art would have been motivated to incorporate ATM protocol into Khuori to transmit data in ATM cells to take advantage of communicating ATM cells such as fast switching, etc. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate ATM interfaces into Khouri.

Regarding claims 104-106, refer to the discussion for claims 1, 10, and 12.

Allowable Subject Matter

7. Claims 23-31, 54-63, 86-102, and 107 are allowed.
8. Claims 8, 9, 39, 40, 71, and 72 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2663

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon-Dong Hyun whose telephone number is (703) 305-4550. The examiner can normally be reached on Monday-Friday from 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen, can be reached on (703) 308-5340.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

11. Any response to this final action should be mailed to:

Box AF

Commissioner for Patents

P.O. Box 1450

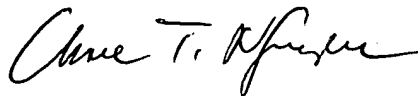
Alexandria, VA 22313-1450

Or faxed to: 703-872-9306 for formal communications intended for entry



S. Hyun

08/07/2004



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600